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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/662,599

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Bruce L. Kennedy

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EXAMINER

SMITH, PHILIP ROBERT

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/662,599	Applicant(s) KENNEDY, BRUCE L.	
	Examiner PHILIP R. SMITH	Art Unit 3779	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-22,24-31,46,48 and 49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-22,24-31,46,48 and 49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112, Paragraph One

- [01] The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- [02] Claim(s) 24-25 is/are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
- [03] Both claims recite that said touch screen is easier to deflect in one direction (opening) than in the other direction (closing). According to the specification, the touch screen is attached by a "hinge 142" that is equipped with "one or more tapping mechanisms". Conventional hinges are equally easy to deflect in either direction. The specified "hinge 142" appears to be a conventional hinge. The only unconventional feature is a "tapping mechanism". It is not entirely clear what a tapping mechanism is, but there is no suggestion that it makes the "hinge 142" more deflectable in one direction than in another.

Claim Rejections - 35 USC § 103

- [04] Claims 19-22,26-31,46,49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beutter (2003/0076410) in view of Rosen (2002/0149706).
- [05] With regard to claim 19:
- [05a] Beutter discloses a medical video instrument having touch screen control comprising:
- a touch screen ("[i]n response to touch-screen or voice generated commands...") for entering control commands ("the operating room control center 42 generates control

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signals to the camera control unit 34," [0030]) to control said medical video instrument ("endoscopic viewing system 20," [0026]), said medical video instrument inserted into a body cavity and generating an image stream representative of the body cavity and displayed on said touch screen;

- a processor ("operating room control center 42," as noted above) for receiving said control commands and for generating control signals to operate said medical video instrument;
- the processor disclosed by Beutter is inherently enclosed by a housing.

[05b] Beutter does not disclose

- that said touch screen is movable between a first position at least partially within a footprint of said housing and a second position extended from said footprint of said housing.

[05c] Rosen discloses

- that a screen ("20") is movable between a first position at least partially within a footprint ("slot 18") of a housing ("utility structure 12") and a second position (see Figures 5-6) extended from said footprint ("free space adjacent to free edge 16") of said housing, said screen deflectable about an axis ("x" in Figure 6; [0028]) of said housing. See [0025]-[0028].

[05d] At the time of the invention, it would have been obvious to a person of ordinary skill in the art that to combine the medical video instrument disclosed by Beutter with the retractable monitor and housing disclosed by Rosen. It is obvious to combine prior art elements according to known methods to yield predictable results. In combination, the medical

video instrument and the retractable monitor would have performed the same function as they had separately; a skilled artisan would have recognized that the result of the combination was predictable.

- [06] With regard to claim 20: the touch screen is un-pluggable from said housing.
- [07] With regard to claim 21: said housing and said touch screen include stackable mating plug portions.
- [08] With regard to claim 22: said touch screen can be used by a plurality of medical instruments.
- [09] With regard to claim 26: said touch screen presents a keyboard to a user.
- [10] With regard to claim 27: Beutter further discloses a sensor ("camera head 28," [0027]) in communication with said processor, said sensor receiving control signals to operate said medical instrument.
- [11] With regard to claim 28: Beutter discloses a speech recognition module ("voice-generated commands," [0030]) executing on said processor, said speech recognition module receiving voice signals that control said medical instrument.
- [12] With regard to claim 29: Beutter further discloses an expert system executing on said processor, said expert system generating control signals to operate said medical instrument ("operating room control center 42 generates control signals" as noted above).
- [13] With regard to claim 30: said touch screen slides out of said housing.
- [14] With regard to claim 31: said touch screen slides out of said housing and is deflectable.
- [15] With regard to claim 46: said medical video instrument generates video data that is displayed on said touch screen.
- [16] With regard to claim 49: As noted above, Rosen discloses that said touch screen is in the first position, said touch screen is positioned within an interior cavity of said housing and when said

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touch screen is moved to the second position, the touch screen [is] positioned at least partially outside of said cavity.

Additional Claim Rejections - 35 USC § 103

- [17] Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beutter (2003/0076410) in view of Rosen (2002/0149706) and in further view of Watai (2003/0060678).
- [18] Beutter in view of Rosen does not disclose a storage for storing the image stream.
- [19] Watai discloses a "hard disk 21e for storing image data" ([0064]).
- [20] At the time of the invention, it would have been obvious to a person of ordinary skill in the art to store the image data disclosed by Beutter in view of Rosen as taught by Watai. A skilled artisan would be motivated to do so in order to preserve captured medical data.

Response to Arguments

- [21] Applicant's arguments filed 12/20/10 have been fully considered but they are not persuasive.
- [22] Referring to the rejection of the recited hinge under 112 First Paragraph, Applicant relies on the precept that "a patent need not teach, and preferably omits, what is well known in the art." In the very next sentence, Applicant asserts that they "have disclosed a novel and nonobvious touch screen that presents greater resistant to opening than to closing." A hinge can not be both "well known in the art" as well as "novel and nonobvious."
- [22a] It is maintained that a skilled endoscopist could not produce a hinge that independently offers more resistance in one direction than the other. A conventional hinge, the definition of which might be found in a dictionary, offers the same amount of resistance when rotating in one direction as it does the opposite direction. If a hinged structure is more difficult to rotate in one direction rather than another, this must be the result of an

independent biasing element, such as a spring. There is no disclosure of a spring or other biasing element in Applicant's specification or drawings.

[22b] The best support that Applicant can summon is the disclosure at [0059] that “[t]o prevent changing angle of the platform 144 or accidental closure, one or more tapping mechanisms are disposed with hinge 142, that make it resistant to unintentional movement.” As noted in the previous Office action, there is no indication as to what a “tapping mechanism” is. Moreover, there is a substantial difference between (A) greater resistance to movement in one direction relative to the opposite direction, as recited in the claim, and (B) resistance to unintentional movement, as taught in the specification. The latter merely implies that frictional resistance in *both* directions is substantial; there is no implied difference in resistance depending on the direction of rotation.

[22c] Applicant submits that “variable friction hinges (exhibit[ing] more resistance in one direction than another), are notoriously well known need not be set forth in the specification in order for this disclosure to be enabling.”

- Firstly, it is notable that the phrase “variable friction hinge” does not appear anywhere in the Application. There is no evidence apart from Applicant’s arguments of 12/20/10 that suggest the “hinge 142” is in fact a “variable friction hinge.”
- Secondly, the phrase “variable friction hinge” is certainly not notoriously well known, as asserted by Applicant. A text search within the patent database yields four disclosures, two of which apply to anthropomorphic test dummies.
- Thirdly, none of the available disclosures of a “variable friction hinge” indicate that the frictional resistance changes based on the *direction* of rotation. Instead, they disclose

that the frictional resistance changes based on the *current angle* of rotation. See, e.g., Grant (4,850,081) at 2/18-27:

The hinge of this embodiment therefore rotates freely from the closed position to the 40° position. Between 40° and 60° (where the closing effect of the weight of the lid is greatest) a relatively high frictional resistance is provided by the protrusions 32 and 34 acting as a primary friction pad plus the blades and grooves 28, 20 acting as a secondary friction pad, and between 60° and 90° a relatively lower degree of friction is provided by the secondary friction pad only.

[22d] In summary, there is no support in the specification for a variable friction hinge, and even if there was, there is no evidence that such a hinge is operable such that “said touch screen is more difficult to deflect in the opening direction than in the closing direction.”

[23] Applicant correctly notes that Rosen does not disclose a touch screen. However, it is clear from the Office action of 9/20/10 that Beutter, not Rosen, was relied upon for the touch screen. See [12a].

[24] Applicant asserts that the retractable monitor disclosed by Rosen is exclusively for use in a recreational vehicle. While this may have been Rosen's inspiration, he clearly recommends it for any location “where space is limited” ([0002]). Rosen states explicitly at [0016] that

Utility structure 12 can be a utility structure of any useful size, or may take the form of a tabletop, a countertop, a work bench top, a desktop, **or any article of furniture that incorporates a generally horizontal top with a thickness suitable to house a video display such as that described herein.**

[25] Applicant asserts that there is no objective reason to combine Beutter with Rosen. But a hospital room is certainly a place where ‘space is limited’, and a skilled artisan would be motivated to provide the touch screen of Beutter in stowable, space-saving arrangement such as the arrangement taught by Beutter.

Conclusion

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- [26] **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- [27] A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
- [28] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip R Smith whose telephone number is (571) 272 6087 and whose email address is philip.smith@uspto.gov. The examiner can normally be reached between 9:00am and 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Sweet, can be reached on (571) 272 4761. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Philip R Smith/
Primary Examiner, Art Unit 3779